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## Mobile phones and the news

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Keywords:	mobile phones, journalism, broadcasting, user generated content, news, violence, crime, citizen journalism
Abstract:	<p>From the mid-2000s, a sudden surge in the use of mobile phone footage by national and international broadcasters was widely anticipated as the precursor to a revolutionary change in the generation and dissemination of news. In the wake of events such as the London bombings of 2005, user generated content (UGC) bureaux and hubs were established by major media organisations from the BBC and CNN to Al Jazeera while new software and hardware was developed. The potential for covering virtually any news development from at least one of the world's 7 billion mobile phones suggested a whole new phase of broadcast journalism was imminent. This study of news bulletins by three UK-based broadcasters – Channel 4, the BBC and ITV – establishes a new methodology for the identification of mobile phone content in broadcasting. It also finds that a decade later, mobile phone footage has not lived up to its early potential.</p>

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**Introduction**

Content generated by mobile phones and used in mainstream news broadcasts in the mid-2000s appeared to indicate that news coverage would never be the same again (Quinn 2004, Martyn 2009). Viewers suddenly were seeing authentic, eye-witness visuals that were unimaginable before the emergence of ubiquitous smartphones. A series of dramatic news events – including the Madrid bombings of 2004 and the Asian Tsunami and London bombings of 2005, each uniquely illustrated with mobile phone video and stills images – showed the potential for a revolutionary impact on broadcast journalism in the 21st Century. Yet, as the dust has settled, the impact of mobile phones on broadcast news has not been as profound as predicted. This paper will attempt to clarify what happened and why.

Within hours of the London bombings in 2005, the British Broadcasting Corporation (BBC) received at least a thousand photographs, 4,000 text messages and 20,000 emails from the public (Martinovich 2007). According to Richard Sambrook (then at the BBC), ‘People were participating in our coverage in a way that we had never seen before. By the next day, our main evening TV newscast began with a package edited entirely from video sent in by viewers ... From now on news coverage is a partnership’ (cited in Martinovich 2007, p40).

A range of factors supported the ambitious expectations for this new, news partnership between citizens and the mainstream media and anticipated an irrepressible upsurge in mobile phone content on mainstream television news channels. These included: the rapid improvement of the technology itself that would automatically enhance capturing, editing, transmitting, and broadcasting mobile phone images; continuing improvement of more

efficient compression algorithms in the reconstruction of data; and the introduction of new ways of remotely accessing the Internet. Another significant driving force was the ever-increasing availability of broadband internet connections, with some countries such as Cyprus, Luxembourg, the Netherlands and the United Kingdom registering 100% fixed broadband coverage, and Malta registering 100% next-generation access (NGA) in Europe (European Commission, 2014). With more than 7 billion mobile cellular subscriptions globally (Sanou 2015) – roughly equal to the world's population by 2016 – an extraordinary number of people had acquired handsets. Advances in visual image technologies and Wi-Fi or 3G/4G capacity have transformed photography and videography into a mass pastime.

Journalists in different parts of the world made use of mobile phones – gaining the nickname constructions of *Mojos* (mobile journalists), *Sojos* (single journalists) or *MMJs* (multimedia journalists), among other epithets – to gather and publish their stories. From the first Mojo pioneers such as Mike Lee of ABC and Kevin Sites in the mid-1990s, mobile phone usage rapidly gained traction among professional journalists as well as citizen journalists. There was an implicit realisation and acknowledgement that it was simply not possible for journalists to be everywhere, all the time, and that Mojo and citizen journalism offered valuable opportunities to expand news coverage (Wilson 2006).

The mobile phone, for a time, seemed to offer the prospect of instantaneous, dynamic connections between people 'formerly known as the audience' (Gillmor 2006 cited in Mills et al 2012: 670) witnessing events and capturing and repackaging what they witnessed for public consumption.

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In spite of these high expectations, data from this study indicate that almost a decade after the phenomenon first emerged, mobile phones accounted for only a tiny fraction of airtime on UK broadcasters’ flagship news bulletins. When mobile phone content was used, it usually comprised short clips, frequently unsourced and commonly re-framed or re-packaged to obscure its origin or content. Mobile phone content also tended to be used mainly to illustrate crime, violence or conflict-oriented stories.

There is a range of contextual reasons that may explain low levels of mobile footage on commercial channels even though television news broadcasters were receiving exponentially more User Generated Content (UGC). These include: the economics of the broadcast newsgathering process, the correspondent-driven news agenda of these mainstream channels, copyright issues around external material, and the cost and challenge of verifying content not produced by the host channel or its news team. We will come back to these in more detail after first setting out the rationale and methodologies used to explore how mobile footage has been used in mainstream broadcasts as well as the type of mobile footage that is used in news broadcasts.

This article sets out to do a number of things for the first time in this field. It excavates the facts of what has taken place in the broadcast industry and sets these against the wide-ranging and ambitious expectations that accompanied the mobile phone revolution. Scholarly predictions of the democratisation of news, the overhaul of traditional broadcast patterns of production, the diversification of audiences and producers and even hints at the holy grail of media companies in the digital age, the discovery of a viable business model, are measured against quantifiable evidence. In addition, this evidence has been gathered

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3 using an innovative methodology that assesses, for the first time, the use of amateur, or  
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5 citizen, mobile phone content in mainstream television news bulletins based on a range of  
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7 contextual and technical factors.  
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12 With reference to this new knowledge, this article makes a number of findings that  
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14 confound hitherto consensual thinking on the impact of mobile phones on news practice in  
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16 broadcasting, including that the revolution that was envisaged with such enthusiasm in the  
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18 mid-2000s has simply failed to materialise. This has a range of implications for theorising  
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20 about the media in the digital age, including a greater appreciation for structural constraints  
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22 when evaluating the capacity of new technology and platforms to generate profound  
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24 change either within the industry or beyond.  
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### 31 **Literature Review**

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33 The era of video-enabled mobile phone, now two decades old – the first camera phone was  
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35 invented in 1997 (Hudson and Oboh, 2012), the first mobile commercial videophone two  
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37 years later (CNN 1999) – has been suggested as another watershed moment of  
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39 technological advancement that will have a substantial impact on journalism practice. Like  
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41 the technology, the literature is relatively new, though portions of it – such as the corpus  
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43 concerning User Generated Content – developed rapidly (Sørensen, 2014; Palmer, 2012; Nel  
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45 and Westlund, 2012; Thurman, 2008; Bivens, 2008; Kovačič and Erjavec, 2008). In her paper  
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47 on UGC usage at the BBC during the Syrian crisis, Johnston (2016) suggested 'the increased  
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49 use of information from social media platforms and the ready availability of smartphones,  
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51 which can be used to capture live events, means that audiences now have the power to  
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53 generate content and disseminate it globally' (p2). BBC journalists, she argued, were  
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required to navigate these platforms along with 'the importance of providing context if using eyewitness video to illustrate news events' (ibid).

Traditional news organisations - including the BBC, NBC News, Al Jazeera, the Guardian and CNN - actively encouraged the submission of UGC. Some, like the BBC and Channel 4, have public service mandates to engage with digital platforms, services and technologies (Sørensen 2013). In the wake of the 2005 London bombings, the BBC established a UGC hub for processing citizen-generated video and image content (Murray 2011). On particularly dramatic occasions – such as the London bombings or the Asian tsunamis – the flood of UGC was so substantial it 'reversed the traditional flow of news, compelling news organisations to act as distributors and pass on material to news agencies and other media', wrote Bivens (2008).

Since 2012, anyone in the UK has been able to capture and report news via downloadable apps such as Blottr, on both iPhone and Android handsets. CNN, Associated Press, Al Jazeera, NBC and UK broadcaster Sky all have mobile applications linking citizen journalists' mobile handsets to their newsrooms (Mills et al 2012: 670). This proclivity for mobile phone UGC matches parallel developments in mobile phone usage by consumers. As Mills et al (2012) commented, 'it is increasingly difficult to think of a national or international news provider that does not distribute media rich news content via mobile' (p.670). The Pew research group found accelerating demand in the US for online videos and news videos and a direct correlation between these activities and ownership of smartphones (2014: 5).

Media executives and scholars (Hudson and Oboh, 2012; Lorenzo-Dus and Bryan, 2011; Kovačič and Erjavec, 2008; Hudson and Rowlands, 2007; Robinson and Robison, 2006; Outing 2005) predicted a seachange in sourcing news as citizens increasingly capture events and immediately share them in the public domain and with news organisations. '[T]he very fabric of news coverage [...] has been changed forever,' wrote Mark Hollands in *The Australian* in 2003 (cited in Martyn, 2009: 198). CNN executive Jonathan Klein predicted more sombrely in 2005 that video footage taken on mobile phones by citizen journalists would be 'increasingly used by news organisations in the future' (Hudson and Oboh, 2012: 4). By 2010, CNN had hosted in excess of 200,000 news videos generated by non-professionals for its iReporter platform (Kperogi, 2011). By 2016, YouTube claimed in excess of one billion users – or a third of all people with internet – with hundreds of millions of hours of video being downloaded and watched each day (YouTube, 2016). In addition, the company said half of the video views were being accessed via mobile phones (ibid).

The literature surrounding the use of the mobile phone in a broadcast setting is not limited to consideration of UGC alone. Scholars anticipated, for instance, that the mobile phone would contribute to the democratisation of the news business by giving ordinary citizens unparalleled access to the mainstream media. 'The digital habitat has stimulated an expanded, ubiquitous, participatory and competitive media landscape,' according to Westlund (2012, p108). It was, further, expected to change the relationship between professional and amateur journalism and between media producers and their users (Westlund, 2012, p108). The mobile phone was expected to shore up accountability as events were examined from multiple viewpoints, with cultural consequences as story-telling increasingly returned to the masses - and the public sphere was wrenched from the hands



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of the powerful (Gordon, 2007). Citizen journalism was born, according to Mythen (2010), as Americans responded to the bland media coverage of their 1988 presidential elections by generating their own material on an unprecedented scale.

This escalating public documentation of events together with greater public acceptance of non-professional video and images was pronounced (Bivens, 2008). It sparked a greater degree of interactivity with newsrooms, argued Väättäjä and Egglestone (2011), which, in turn, began to change relations between citizen and professional journalists. John Mills and colleagues (2012) noted that, by 2005, collecting, reporting and distributing news by members of the public using mobile phones and portable handheld devices was becoming 'mainstream' (670).

Continually improving software and hardware and the convergence of technologies has led to the easy flow of data files across different platforms, adding significant impetus to this explosion in user-generated video news content (Avilés and Carvajal 2008). The increasing availability of broadband internet connections was expected to increase the volume of citizen-generated news videos (Martyn 2009). The capability for continually reconfiguring and adapting the mobile phone through remotely downloadable software applications ('apps') gave the instrument even greater flexibility to generate and stimulate new and innovative practices (Watkins et al, 2012). This innovation included embedding multimedia content in traditional media forms, for example printing QR (Quick Response) codes in print magazines. Mobile software developers were quick to respond to the appetite consumers had for publishing local news online (Mills et al, 2012).

The panoply of encouraging signs and statistics about the adoption of mobile phones by citizen journalists shielded constraints to the development of mobile phone content as an enduring mainstay of mainstream broadcast news bulletins. There are serious obstacles that may yet derail the technology's potential. New technology is always unevenly applied and there are no guarantees consumers will take-up technology or that they will use it in the way envisaged by its creators (Chyi and Chadha 2012). There are significant ethical considerations, for example, in verifying the authenticity and reliability of video content. The severe consequences for media organisations that lose credibility and trust are already well-documented (Meyer 2004). The utilisation of unverified UGC content exposes media organisations to the censuring and loss of esteem of the type handed to ITV by Ofcom in 2012. Media organisations have established structures and procedures for verifying UGC content. The BBC's UGC hub routinely conducts telephonic and electronic verification practices (Murray 2011), but at times – such as when the BBC broadcast fake video content of the Costa Concordia shipping disaster (2012) and some doctored photographs of the Syrian conflict (Hamilton 2012) – these have proven inadequate. With the potential for litigation and reputational damage extremely high, it is not surprising that UGC footage is carefully vetted, framed and sanitised by mainstream broadcasters (Lorenzo-Dus and Bryan 2011). Various authors have highlighted verification challenges, including of online images (Pasquini et al 2015, Boididou 2014). There are also opportunities for citizens to contribute positively to news verification processes, with Bellingcat highlighting the case of a collection of 'self-taught, open source intelligence analysts' who identified the Russians as responsible for shooting down Malaysian Airlines flight MH17 over Ukraine in 2014 (Tucker 2015, p26)

One obstacle to this crowd-sourcing type of reportage has been that, although technology has improved, significant weaknesses and problems have existed in the hardware, software and management of editorial systems. 'The largest barrier to uptake,' argued Mills et al (2012) 'seems to be the tension between the development of the technology workflow and its lack of integration with editorial processes' (p.681). Substantial costs have been incurred as mobile phone content is integrated with editorial systems, with these ranging from acquiring technology and re-training the workforce to opportunity costs of slower editorial processes as working practices have been introduced (ibid). In addition, with so many software and hardware variations in the market, incompatibility between technologies and high variability in sound and picture quality have hampered information processing through mobile phones (Mills et al 2012, p.681). 'With so many gadgets permeating the market', noted Chyi and Chadha (2012), 'a myriad of platforms and options for people to access media' exist, further complicating the integration of systems (p.432). Technological challenges have extended to news audiences, with variations in the functionality, usability and data transfer costs of different handsets using different service providers in different regions (Watkins 2012). Technologically, the capturing, transmission and publishing of mobile phone video content has been anything but resolved or universal.

Journalists themselves have resisted the successful implementation of the new technology. There has been a reluctance among journalists to be re-tooled into content providers furnishing almost raw visual and audio material accompanied by real time speculation and comment, rather than analysts grappling with facts (Bettag 2000). With journalism in crisis following the migration of audiences and advertising to online media (Levy and Nielsen 2010), ever-shrinking newsrooms have been under pressure to gather adequate volumes of

content. Various trials and pilot projects have been undertaken in different parts of the world to harness UGC, largely by newspaper companies seeking to diversify their online content and cut costs. But the results, particularly in the UK, have not been compelling (Nel and Westlund 2012). Journalists have struggled to combine sophisticated hand-held technology with traditional question-and-answer personal interaction. They have been easily distracted by the technicalities of, for instance, getting the sound and camera angle right on the mobile phone rather than concentrating on the nuances and content of the speech or event they are meant to be covering (ibid). Citing the development of 'Mobi Journalism' in Slovenia, Kovačič and Erjavec (2008) noted that a new 'quasi' form of citizen journalism has deliberately set out to deceive audiences 'in the name of capital and profits, exploiting new media technologies for commercial purposes' (ibid). Prevailing concerns over the quality of UGC, its news values and the ethics of its production and reproduction tainted journalists' perceptions of the value of mobile phone content. In addition, supplementing traditional newsrooms with mobile phone capability added a new layer of complexity and challenge, according to Väättäjä and Egglestone (2012): 'Mobile assignments ... not only change the current work processes, but also potentially the roles and responsibilities of reporters and the editorial team in the newsroom as well as their workflows' (p.485).

In the literature, scholars have noted too the cultural and social consequences emanating from the creativity and connectedness of mobile phone technology. The mobile phone is a 'fascinating object and set of cultural practices and affects' that may signal 'emergent geo-ethnographies of media practice' observed Watkins et al (2012: 665/6). Like the Sony Walkman of three decades ago, the mobile phone 'marks a historical con-juncture in which notions about identity, individualism, lifestyle and sociality – and their relation to

technology and media practice – require articulation' (Hjorth et al 2012). Goggin (2006) argued that mobile phones facilitate cultural, economic, political and social innovation.

Just as scholars have highlighted the potential for positive cultural and political spin-offs of citizen participation in the gathering and production of news, so too are there concerns. Healthy democracy requires a diversity of voices, including oppositional ones and those who resist prevailing orthodoxies. The corralling of oppositional voices within the channels and flows of mainstream information systems – by monopolising and restricting the publishing of selected UGC on broadcast platforms – may undermine diversity and democracy. In China, for instance, the country with the largest number of citizens engaged in online blogging and communication activities, the state has expended huge resources ensuring debate on important political and social subjects is limited, that the purveyors of radical views are stopped and punished and that paid web monitors direct public discussion and opinion (Author 2012). Al-Ghazzi (2014) noted the use of social media by state agents and torturers in Syria, highlighting that technologies also have the potential for intimidation and harassment, a contrary position to prevailing narratives around digital media and its relationship to participation and democracy.

Other developing countries and some developed nations have witnessed growing state intervention in cyberspace in recent years in the wake of global terror and financial insecurities. For Watkins (2012), cultural norms, social hierarchies, economic disadvantage and lower digital literacy skills can erect overwhelming barriers to the adoption of mobile phone technologies and exacerbate the global digital divide (p.667). It is not only the state that has intervened in the collection and dissemination of online information. The corporate

and governmental public relations industry continues to exert a profound influence on content. A strong potential for misinformation exists when members of the public contribute their own reports to the flow of news and information, noted Pavlik (2003).

For the last decade, few have doubted the potential of mobile phones to fundamentally alter global communications. In some areas, such as among the world's rapidly expanding social media and even as part of news organisations' increasingly sophisticated online platforms, this may well prove to be true. But in the world of mainstream broadcasting, the mobile phone has failed to live up to the hype.

### **Methodology**

Scholars have acknowledged the fundamental differences between traditional film and video content and the qualities and characteristics of digital video production (Daly 2009). Alexandre Astruc (1948) predicted more than half a century ago that new digital cinematic technologies would develop new 'means of expression' while Cubitt (2004) suggested that a new form of 'collaboration' has developed between humans and increasingly complex computers. We argue in this paper for the first time in the field that professionally generated broadcast video and material produced with hand-held mobile phones are two, quite different forms of content. One is produced according to professional values and is supported by the training, budgets and sensibilities of corporate broadcasters and their correspondents. The other is the consequence of massification of mobile phone technology and the willingness of amateur witnesses to capture what they can see on their device. These two forms of content have, as Daly suggested, 'medium-specificity' (2009, p4). This medium-specificity implies a new aesthetic based on the 'new flexibility of the camera to

capture images and situations that were previously either impossible or prohibitively expensive' (p.7). The key methodological challenge in this article and driver of an innovative set of analytical tools, was distinguishing between professionally generated video and mobile phone content that is usually, though not always, captured by an amateur eye-witness. We were less interested, in this paper, in the authorship of the non-professional content than in the fact, duration and subject matter of its use. As a range of scholars (Doane 2007, Prince 2004, Dickinson 2001), from both film studies and semiotics, have argued, this differentiation between professional and amateur sources constitutes a legitimate and valuable methodological avenue of enquiry.

There has been no previous attempt to measure the proportion of mobile phone or amateur video content contained in UK mainstream news bulletins. This research project analysed a six-month period of news broadcasts on the UK's three main freeview news television channels, the British Broadcasting Corporation's BBC1, ITV1 (Independent Television) and Channel 4. Although Independent Television News (ITN) produces and provides much of the news content broadcasted by the news bulletins of both ITV and Channel 4, we decided to approach them as two separate entities when isolating the sample, given the differences between their targeted audiences and the news packages themselves. Scholars have endorsed the value of employing qualitative content analysis to media texts including for the identification of important themes (Bryman 2012). While some have acknowledged the potential for variations in reportage using this method, a wide range of approaches and techniques are now commonly applied, such as testing message characteristics (Holsti 1969), the exposure of the gap between portrayal of a certain group and the reality (Dixon,

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3 Azocar and Casas 2003) and the use of content analysis as a springboard for media effects  
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5 studies (Sweetser, Golan and Wanta 2008).  
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10 This study, however, offered a much simpler but no less radical approach. It used content  
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12 analysis in what Wimmer and Dominick (2011) described as 'the traditional, descriptive  
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14 manner' and aimed primarily 'to identify what exists' (p.158). Our research questions were  
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16 simple: how much mobile phone footage is actually being used within selected mainstream  
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18 television news programming, and what is the subject of these clips?  
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24 The broadcasts selected were the channel's flagship news bulletins, BBC's News at 6, ITV1's  
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26 News at 10 and Channel 4's 7pm news bulletin. In all, a corpus of 90 news bulletins (or 44  
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28 hours of mainstream news broadcasts) were recorded and analysed. Each bulletin was  
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30 broken down, second by second, into a number of categories including studio, live and  
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32 packaged video content. In recording one week per month over a period of six months, it  
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34 was hoped to iron out any unusually prominent news occurrences that might distort the  
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36 general pattern of the data. The overall objective was to see how much footage in these  
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38 bulletins was produced by mobile phones, and to register further how this footage was used  
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40 and whether or how it had been sourced.  
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48 The bulletins were broadcast on weekdays between September 2012 and February 2013.  
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50 For each month, we gathered bulletins that were aired in the penultimate week of the  
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52 month. This generated just over 159,000 seconds of broadcast material spread across three  
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54 channels and measured over a 24-week period (see Table 1). Coding focused on the  
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56 duration, frequency, subject matter and source of the content. Where video material was  
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clearly mobile phone-generated, this was noted, along with content that could have been gathered by mobile phone, as distinct from footage that was clearly captured on television cameras live or in the studio or was from the archives. The investigators tended to include footage that may have been mobile phone material rather than exclude it to ensure all mobile footage formed part of the sample. Individual video clips were also measured as these were at times edited together into longer sequences while a note was made of repeated material.

With video footage often poorly credited in mainstream television news broadcasts (see Lorenzo-Dus and Bryan, 2011), the task of identifying which content was generated by professional television crews and which was captured by citizen journalists or possibly professionals equipped with Mojo technology, or even digital SLR cameras with video capacity, proved a significant challenge to the researchers. However, a number of methods were identified by the researchers to differentiate between and categorise the different kinds of footage. The collective indicators, the authors contend, constitute the foundation of a new visual lexicon of analysis in this area.

With the methodological emphasis on visuals, the first and most obvious indicator was the aesthetic quality of the video. Professional news crews are trained to capture quality content under just about any conditions. Unless they are actually running while filming, panning is usually smooth and focus precise. This level of quality is very difficult to achieve with a hand-held mobile device, though equipment does exist which can significantly improve video quality.

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3 A second indicator was the presence of zoom focusing. While many mobile phones do have  
4 a zoom capacity (and a range of lenses exist which give mobile phones extra capacity in this  
5 regard), we found that news video captured on mobile phones seldom made use of the  
6 zoom facility. Where the zoom was used, the quality of the video deteriorated significantly.  
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8 Efficient, smooth zooming was generally the preserve of the professional teams using  
9 camcorders containing mechanical zooming systems. Mobile technology uses a pinch zoom  
10 system and this is difficult to manipulate smoothly during filming.  
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15 A third indicator was the framing. Any professional camera operator worth their salt will  
16 automatically and naturally frame their subjects in a particular way, usually just off-centre in  
17 the classic photographer's 'Rule-of-Thirds' composition grid. Non-professionals are unlikely  
18 to worry too much about composition through their viewfinders. Further cues were  
19 discernible: the presence of lighting (though this too may be acquired for mobile phones)  
20 and even the behaviour of subjects who may act differently when a television camera  
21 bearing the insignia of a major international channel is filming a few feet away (see Al-  
22 Ghazzi 2014).  
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43 We also took into consideration that not all the footage used in the bulletins was digital HD  
44 video of excellent quality. Some local videos coming from the US or video footage coming  
45 from the Middle East was analog video, and the conversion from one video standard (for  
46 example, from NTSC to PAL) considerably lowered the quality of the video footage. In such  
47 cases, footage could be wrongly considered 'mobile'. Here it was important to consider the  
48 other indicators to identify whether material was produced by professionals. Additionally, in  
49 amateur photography, mobile sensors are considerably smaller than the CMOS  
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(complementary metal oxide semiconductor) or CCD (charge-coupled device) sensors contained in professional camcorders, and stills taken from a mobile device normally display a subtle amount of blurriness characteristic of this type of technology. In this regard, it was relatively easy noting the difference between a paper-printed photograph and a mobile one.

Finally, the coders looked to see what equipment was being used by others recorded in the footage. If television news camera teams or professional photographers were clearly in evidence, as they often were, it was unlikely the major channels were relying on hand-held mobile phone footage. But if only mobile phones were evident, this was a strong indicator that the source of the content was likely to be amateur. In the coding sheet, note was made of whether any of these factors were evident and the decision made.

Throughout the sample researchers identified a small number of cases where the content was produced by professional broadcasters using a mobile device. In such cases, footage was either explicitly or implicitly credited as mobile footage by the broadcasters, so for the purposes of this research such content was classified as mobile footage and not as professional. This decision was based on the emphasis on the device used to record the news event as opposed to the individual filming it. This is also why the study did not focus solely on UGC material. Sourcing was allocated according to the credits (occasionally superimposed on the footage (such as 'amateur video', 'YouTube' or the name of the original recording channel), by verbal clarification from the presenters, or by estimation by the investigators based on the content and quality of the material (as indicated earlier). Subject matter was broken down into a series of news categories (Cohen, 2013) including: natural disasters, natural phenomena, celebrities, crime, politics, human interest,

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3 violence/conflict, business, international, sport, and weather. Care was taken to avoid  
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5 double counting the usage of footage, with overlaps in news categories noted in the content  
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7 audit sheets<sup>2</sup>.  
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12 In spite of the limitations, it was generally possible to differentiate between professional  
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14 and amateur video and, with a little more difficulty, to identify when a mobile phone was  
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16 used as opposed to another handheld device. Certainly any mobile phone content that was  
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18 used within the sample was reflected in the data. The focus of this study on flagship  
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20 mainstream news bulletins, many of which are correspondent-driven, naturally led to a  
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22 smaller proportion of mobile phone/citizen journalism in relation to professionally  
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24 generated content than perhaps the company's online platforms (the BBC's iPlayer, ITV's  
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26 ITV Player and Channel 4's 4oD, for instance). We considered it important to log the  
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28 prominence of mobile phone content on these programmes – not least because of the high  
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30 expectations voiced by many that this would become increasingly significant over time, but  
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32 also because the next phase of this research project will focus on comparisons with  
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34 mainstream news platforms. The intention was to develop a baseline dataset allowing for  
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36 longitudinal data collection and analysis.  
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46 It is worth mentioning a few other limitations that are relevant to this study. A range of  
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48 platforms, including for instance the online news sites of the broadcasters, also host UGC  
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50 and, on occasion, mobile phone content. In addition, non-broadcast media (and non-media)  
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52 organisations also host this content to different degrees. These are areas for future research  
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54 and investigation, though they do not fall into the ambit of this study, which is deliberately  
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56 designed to provide a baseline of mobile phone material on the main broadcasters' flagship  
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news bulletins. It is for the same reason we do not look at other programmes or bulletins that may also use the kind of content we are investigating. The flagship bulletins are of course driven strongly by the correspondent’s news agenda and by the economics of sending expensive news crews to cover stories. Both of these would militate against the use of non-ENG material. We wanted, however, to measure the reality of predictions of the increasing use of mobile content in flagship programmes as an appropriate starting point for judging its impact and frequency.

**Results**

Perhaps the most remarkable result from this content analysis was that the proportion of mobile and YouTube footage used in the sample - compared to professionally produced material - was so small that it contradicted prevailing consensus among scholars that mobile phone generated content was likely to become a major feature in commercial news production. Table 1 offers a detailed account of how many seconds were devoted to each type of footage. As can be seen, all three channels used only a tiny proportion of mobile phone footage in relation to the total airtime of the broadcasts as well as the usage of professional video content.

[Insert] Table 1: Totals

This usage dynamic can be better observed in Figure 1, where only 1.4% of the video used by the BBC in its BBC1 News at Six broadcast comprised of mobile phone content. This fell to 0.4% of the total broadcast (across all three channels), including studio, live and correspondent packages. Amateur content sourced from YouTube on the BBC was even

smaller at 0.07%, a trend reflected across all three channels. In Channel 4's longer (60 minute) bulletins, the proportion of mobile phone usage was slightly higher than the BBC's at 2.3% (or 1,268 seconds as a proportion of 54,199 of professional video content). ITV's News at Ten was close to identical to the BBC's usage of mobile phone content, at 1.8% (497 seconds mobile footage compared to 27,322 seconds of professional video). Over the period monitored, all three bulletins used only a small fraction of content sourced from either mobile phone or amateur sources.

[Insert] Figure 1: Video sources

The sourcing of mobile phone and amateur content – either by anchor introduction or by super-imposition of a credit such as 'amateur video' – was particularly infrequent among all three channels. Figure 2 shows that the BBC credited, only 33 seconds of the 641 seconds of mobile it broadcast during the period, or just over 5% of mobile content, as amateur. Where the BBC embedded content from YouTube in a news story, it credited the source more frequently at around 13% of the time (16 seconds credited of a total of 118 seconds).

[Insert] Figure 2: Crediting

Channel 4 attributed a far higher proportion of mobile footage in its bulletins with more than 36% of this kind of content receiving some kind of attribution. Similarly, Channel 4 acknowledged the source almost always (91%) where it used YouTube content. In the bulletins analysed, ITV credited only 10% of mobile footage but most (74%) of its YouTube content. This is probably because of YouTube's powerful global presence and the copyright

mechanisms (<https://www.youtube.com/yt/copyright/en-GB/>) that are triggered if its content is not properly credited. In all, the three channels collectively credited only 28% of the content they used that did not emanate from its own correspondents or staff, with much of this YouTube rather than mobile.

[Insert] Figure 3: Mobile and YouTube Topics

On the subject matter of mobile phone and amateur video content used in mainstream television broadcasts, a strong emphasis on crime, violence and conflict was clearly discernible from the data displayed in Figure 3. The highest peaks registered showed the two most frequent subjects in which mobile phone footage was used in the sample: crime (855 seconds of mobile across all three channels) and violence and conflict (1,040 seconds, including international violence and conflict) as compared to natural disasters or phenomena (31 seconds), business stories (8 seconds), sport (26 seconds), or domestic UK politics (24 seconds). Weather reporting attracted 114 seconds of mobile video and 29 seconds of YouTube content.

[Insert] Table 2: Stories

For illustrative purposes, Table 2 displays a catalogue of stories using mobile or amateur content. By looking at the issues and events covered by the stories, it can be argued that the video images used largely concerned crime and political violence with only a small proportion reflecting human interest, natural disasters or other subjects. Even where stories concerned wide-spread developments affecting many thousands of people, such as the

floods in the UK that were heavily reported during the sample period, very little footage was taken from amateurs. Broadcasters tended on the whole to use their own material and on only a handful of occasions made use of UGC, which was often sourced from YouTube rather than through their own UGC channels. Overall, mobile phone footage was more commonly used in international stories (962 seconds in total across all three channels) than in domestic ones (685 seconds).

There did not appear to be any mobile phone video generated by professional journalists in the broadcasts. This finding has led us to speculate that the 'Mojo' (mobile journalist) method was restricted to newspaper websites in the UK at the time this study was conducted. Occasionally, mainstream broadcasters make use of satellite phones to aid reportage by correspondents, but there were no examples of this in this corpus.

To summarise, the data indicated that, relative to other video usage and to bulletin content in general, mobile phone content represented a very small component of mainstream UK broadcasters' output on its flagship news programmes during the period. Mobile phone content was usually limited to one or two short clips per bulletin, frequently accompanied stories focusing on violence or conflict and, more often than not, was poorly credited. One of the most common uses of mobile content was to illustrate stories about human death or missing people or as an eyewitness account of an event that the mainstream broadcast crews were unable to reach quickly (such as a plane crash in Nepal).

## Analysis



Fevered predictions that mobile phone content would make up an ever-larger proportion of news have not come to pass in the production of mainstream television news bulletins. Mobile phone content is used sparingly, if at all, in news broadcasts. Where it is used, it is seldom to provide unique viewer-oriented experiences or reportage. More often, it is for illustrative, rather than narrative, purposes. Mobile phone content (and social media content) has a role rather like the family photograph in the pre-digital era: borrowed or copied from grieving friends or family and used as a studio backdrop or to give context to a graphic, usually without being sourced.

The BBC, Channel 4 and ITV have historically displayed particularly strong production values and their editorial teams are able to allocate resources for the commissioning of original content. This may explain the scarcity of mobile content within their news bulletin running orders. The reluctance to use footage that is not produced in-house is arguably guided by a need to preserve the authoritative voice of the coverage and safeguard the axiomatic norms that confer credibility and authenticity to their accounts. In this sample, broadcasters used mobile footage in exceptional circumstances. Our analysis of the data suggested that mobile footage is arguably used as a means to reach spatiotemporally remote events whose dramatic impact could not be conveyed by any other means. This obviously results in a compromise of production quality at the expense of the illustration of an event as it unfolded. In such cases, we argue that the key element that guides editorial decision-making is the temporal remoteness rather than the spatial one – which can be easily overcome by sending a team to any geographical location to follow-up on the story. Nonetheless, events that are unreachable simply because they have already happened tend to force the inclusion of mobile footage in most cases.

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5 Mobile recordings of Foxconn workers violently rioting against extreme working conditions,  
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7 or the amateur footage showing the victims of the plane crash in Nepal still trapped inside  
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9 the burning cockpit, or the YouTube video of the extremely happy surfer pirouetting on a  
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11 flooded street of England, or the shocking images of a Russian truck driver who survived a  
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13 lorry crash after being catapulted through his windshield: all represent unique captured  
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15 moments unlikely to have also been recorded in a video package with high production  
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17 values. Interestingly, all these examples were used briefly in passing and were either a small  
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19 portion of a larger story or were merely illustrative snippets compressed together with  
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21 other short news briefs. On only two occasions in the sample did mobile footage go beyond  
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23 merely illustrative purposes and actually drive the narrative of the story (as it had done after  
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25 the London bombings for instance). The first was a report on BBC Panorama's use of covert  
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27 mobile footage to break a story on care home abuse. The second was based on exclusive  
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29 footage taken on mobile phones of the aftermath of the murder of foreign workers in a  
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31 compound in Libya. In both cases, the decisive factor driving the inclusion seems to be the  
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33 candid quality of their depiction – instead of their spatiotemporal remoteness.  
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43 So why have broadcasters restricted the use of amateur mobile footage that appears to be  
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45 perceived by audiences as authentic and which also represents a lower monetary  
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47 investment compared to high quality production reports? In this respect, there have clearly  
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49 been powerful obstacles that have curtailed the potential of mobile phone technology, at  
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51 least in broadcast news bulletins. The results of this study suggest a number of dimensions  
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53 that have contributed to this pattern among mainstream UK broadcasters.  
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We have mentioned the significant challenge of verifying the authenticity and reliability of video content. Our data supported the observation by Lorenzo-Dus and Bryan (2011) that broadcasters are very cautious when it comes to UGC and we would add that they prefer, where possible, to take material from other regional broadcasters or agencies (the logos are apparent). This dynamic might help to explain the prevalence of credited material from YouTube or the presence of identical mobile material in the news bulletins of both Channel 4 and ITV. Our data showed a propensity to use mobile material that was previously filtered by either an international news agency or, in the case of Channel 4 and ITV, by the agencies to which ITN subscribed. The frantic news cycle of the national broadcasters analysed in this study did not seem to allow an internal refinement of the UGC stream submitted by citizen reporters, presumably as the process of online verification tends to be particularly complex. Amateur material was also frequently taken from YouTube, often credited to YouTube rather than the particular user who uploaded content to the platform. By using YouTube's algorithms as an automated refinement system, the broadcasters appeared to trust the platform to bypass the tedious task of internally filtering and verifying the UGC content, improving time response within the newsroom in the process. In this light, broadcasters preferred to compromise the authenticity and the eyewitness strength of mobile footage at the expense of the verification of such content.

An additional obstacle to this mode of reportage is that while technology is improving, significant weaknesses and problems exist in the hardware, software and in the management of editorial systems. The quality of amateur footage was, of course, considerably lower than the reportage that was professionally produced. The amateur content was generally uploaded to online platforms from shoot-and-share devices and, as a

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3 result, the compression of the file was significant, pixelating the image or diminishing sound  
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5 fidelity. The inability to zoom in while retaining the quality of the image limited not only the  
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7 aesthetic appeal of the frame, but also encouraged general shots which, on many occasions,  
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9 impeded clear sight of the subject of the news event. This was particularly true in the case  
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11 of the mobile footage. This study showed that the correlation between the topics of the  
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13 footage, which were frequently associated with conflict and violence, and the incapacity of  
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15 the hardware to achieve proximity without compromising the safety of the reporter, might  
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17 be the reason for the prevalence of such general shots. Although general shots were largely  
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19 effective as situational or contextual frames and provided a good sense of the magnitude of  
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21 the event and contributed to enhance its impact, where a more proximate relationship with  
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23 the news subject was demanded (the video of Malala after being shot, for instance) the  
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25 technology proved inadequate. In sum, it appears that prevailing concerns over the quality  
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27 of mobile UGC, over its news values and over the ethics of its production and reproduction  
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29 continue to impact on journalists' perceptions of the value of mobile phone content. In  
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31 addition, supplementing traditional newsrooms with mobile phone capability adds a new  
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33 layer of complexity and challenge, weakening the celebrated interactive and creative  
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35 relationship between citizen and professional journalists.  
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## 45 Conclusion

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47 As conflict zones remain difficult to access for outsiders, including journalists, there is  
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49 demand for citizen-generated video content from these areas, though this is not without its  
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51 risks in terms of the content's integrity and truthfulness. The crisis in Syria, Libya or  
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53 Afghanistan, clashes in Greece, Algerian oil killings are prime examples of news events that  
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55 have been captured using citizen-produced mobile phone images. According to Pantti  
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(2013), 'the emergence of new visual-based communications technologies, particularly the camera- and video-enabled mobile phone, have provided unforeseen opportunities for recording and distributing lived experiences ... across the globe' (p.203). But, in spite of the high expectations surrounding the uptake of mobile phone technology and its impact on journalism and on news broadcasting, there is little evidence of the watershed moment that many anticipated. Mobile phone generated video images are used sparsely on freeview mainstream broadcast news bulletins.

There are undoubtedly other news platforms or channels on which mobile footage is used more frequently and this is certainly an avenue for further research. In addition, the resources available to the mainstream broadcasters to produce their own video would naturally militate against extravagant use of UGC. However, the claims of journalists and scholars alike a decade ago did suggest an imminent seachange in video authorship. The experience of major mega-disasters around 2004-5 combined with the rapid sophistication of mobile phone technology and the public's apparent appetite for video-making and story-telling prompted predictions of a revolution in broadcasting that would change forever the relationship between journalists and citizens. This revolution has been of far gentler proportions than most imagined. Predictions that 'the roles and control over news media production are shifting' (Westlund 2012: 109) appear not to have impacted fundamentally on mainstream broadcasters, at least as far as major broadcasters' flagship news programmes are concerned.

This sluggish response to new technologies and changing behaviour patterns is nothing new to traditional media (Mills et al 2012) and may in part explain its current crisis. Chyi and

Chadha (2012) noted, for instance, that after 15 years of experimentation, only 10% of UK newspapers' total advertising revenue came from web operations (p.432). It is worth adding that authors such as Sørensen (2014) are tracking significant moves among the major broadcasters toward the curation of content, including UGC, on their online platforms.

The reasons for the low uptake of mobile phone technology equipped with high-resolution video capturing capability are believed to be a combination of obstacles. These include: professional journalists' ambivalence to the new technologies, uneven development of hardware and software, difficulties in integrating mobile phone technology into newsroom production systems and the costs and risks of verifying citizen-produced mobile phone video content. Together these impediments have constrained the mobile phone revolution.

The implications of this stalled revolution are numerous. Could mainstream news channels lose their audiences by failing to cater for high demand for content available only through amateur means? Will professional video producers be made redundant by the millions of amateur storytellers producing free content? Will mobile phone content, when it is used, further intensify coverage of conflict, violence and crime? Will de-professionalised news content impact on the status of journalism and therefore impact on its function as the Fourth Estate, particularly in fragile or emerging democracies? Will the mainstream channels finally divert resources away from their well-heeled correspondents and high-tech equipment to perform more of an aggregating or curating role? With a billion people around the world regularly downloading video content on YouTube alone, the question remains how much longer the UK's mainstream broadcast sector can remain unmoved by

the potential of citizen journalism and mobile phone content to inform its flagship news programmes.

Notes

<sup>1</sup> The BBC’s UGC hub routinely conducts telephonic and electronic verification practices (Murray 2011), but at times – such as in the broadcasting by the BBC of fake video content of the Costa Concordia shipping disaster in 2012 and of doctored photographs of the Syrian conflict (Hamilton 2012).

<sup>2</sup> A close scrutiny of the sample allowed us to identify several clips that could be included into more than one category. If such a clip emerged during the analysis, we proceeded to internally peer-review the categorisation conducted by the fellow author responsible for the analysis of that portion of the sample. Manual close-scrutiny was then conducted to moderate any categorisation dispute and a collective decision was made.

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Table 1: Total Content in Seconds

	BBC Studio	BBC Pro	BBC Mobile	BBC YouTube	C4 Studio	C4 Pro	C4 Mobile	C4 YouTube	ITV Studio	ITV Pro	ITV Mobile	ITV YouTube
Sep-24	362	1288	48	18	1367	1631	140	16	266	1260	38	11
Sep-25	539	1183	57	12	849	2237	43	29	286	1340	22	12
Sep-26	294	1274	78	21	757	2297	0	5	302	1277	0	10
Sep-27	334	1292	42	0	875	2252	45	37	314	1197	8	0
Sep-28	310	1310	99	11	883	2153	118	11	278	1182	151	0
Oct-22	458	1200	0	0	795	2143	26	16	355	931	0	0
Oct-23	404	1299	0	0	1165	1469	0	0	254	932	0	0
Oct-24	412	1338	0	0	1074	2034	0	35	390	899	0	0
Oct-25	338	1321	0	17	675	2240	13	0	328	962	0	0
Oct-26	645	793	75	39	951	1624	64	0	324	711	70	0
Nov-26	374	1322	28	0	291	2789	79	0	283	961	118	0
Nov-27	378	1361	0	0	1167	1836	92	0	373	977	0	0
Nov-28	430	1310	6	0	1257	1745	72	0	451	897	0	0
Nov-29	420	1288	5	0	1157	1868	83	0	253	1096	0	0
Nov-30	425	1239	26	0	376	1201	0	14	351	1007	0	0
Dec-24	155	663	0	0	171	678	0	0	167	603	0	0
Dec-25	89	464	0	0	50	78	0	0	81	249	0	0
Dec-26	123	575	0	0	96	351	12	0	181	658	0	0
Dec-27	297	751	21	0	501	902	15	0	138	393	9	0
Dec-28	239	755	79	0	370	1071	66	0	75	341	36	0
Jan-21	377	1097	14	0	529	2165	0	0	301	976	6	0
Jan-22	364	1190	5	0	1222	1741	141	0	326	953	0	0
Jan-23	392	1296	6	0	971	1993	0	0	242	1095	0	0
Jan-24	512	1153	21	0	911	1894	47	0	343	879	0	0
Jan-25	344	1180	0	0	540	2562	45	0	258	790	0	0
Feb-18	338	1219	0	0	1220	1895	0	0	229	1107	0	14
Feb-19	423	1267	0	0	695	2351	0	11	247	975	8	0
Feb-20	382	1371	0	0	681	2499	0	0	267	1094	0	0
Feb-21	432	1292	31	0	842	2042	167	18	209	589	3	0
Feb-22	372	1351	0	0	648	2458	0	0	266	991	28	0
<b>Totals</b>	<b>9123</b>	<b>34442</b>	<b>641</b>	<b>118</b>	<b>23086</b>	<b>54199</b>	<b>1268</b>	<b>192</b>	<b>8138</b>	<b>27322</b>	<b>497</b>	<b>47</b>
<b>Grand total</b>											<b>159073</b>	

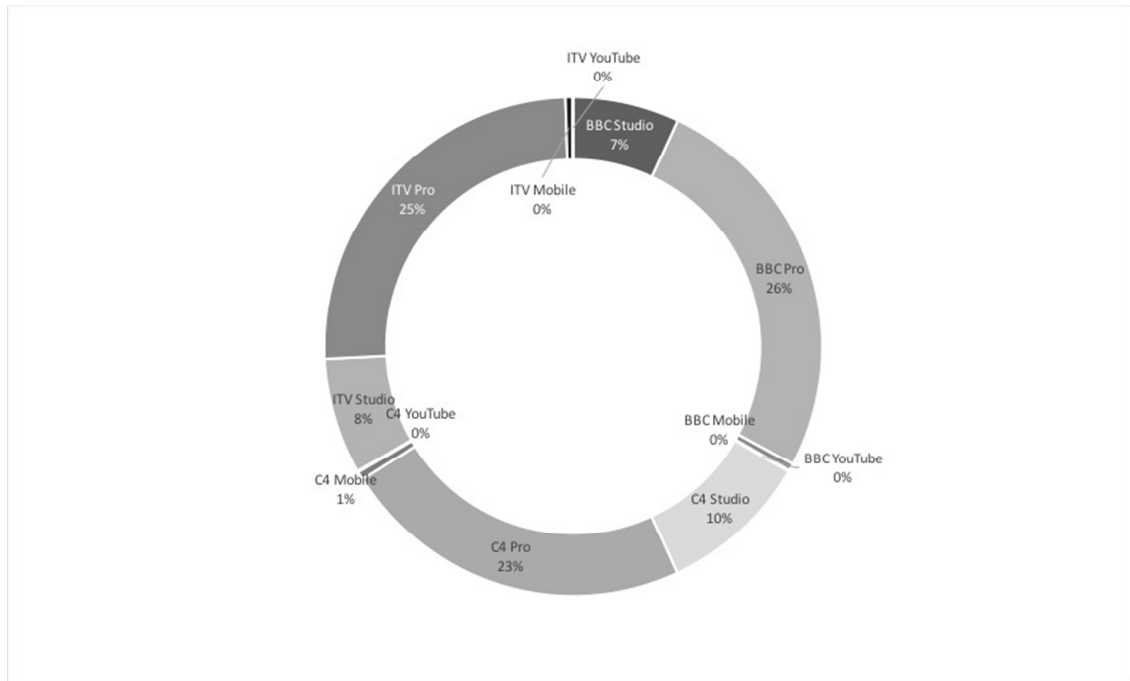
Total news bulletin sample content, broken down into various categories (in seconds) including video content generated by correspondents (Pro). All data gathered for this study by the authors.

Table 2: Stories

BBC stories told using mobile devices and/or YouTube	C4 stories told using mobile devices and/or YouTube	ITV stories told using mobile devices and/or YouTube
Missing schoolgirl	Missing schoolgirl	Missing schoolgirl
Syria crisis	Foxconn riots	Soldier death
Greece clashes	Russian truck driver survives crash	Russian truck driver survives crash
UK floods	Ballet Blues	East Ender actress murder
Hamza deportation	Syria crisis	Syria crisis
Plane crash Nepal	UK floods	UK floods
Whooping cough	Plane crash Nepal	Plane crash Nepal
Steve Ballmer Microsoft	L'Aquila earthquake trial	China black jails expose
Climbing windows cleaner	Terror plotting trial	Suicide bomber
Care workers jailed	A4e scandal	Hurricane Sandy
Child killed in gas blast	Dissident artist Gangnam Style	Malala shot
Pink Star in memory of young girl	Malala shot	Whooping cough
Child abuse	Stolen Olympic medals	Care workers jailed
Abducted girl reunites with her mother	Whooping cough	Child abuse
Avalanche	Afghanistan	Abducted girl reunites with her mother
Vigilantes	Care workers jailed	MP investigation
Helicopter crash	Egypt tension	Child with cancer supports Bradford
Crime figures decrease	Child abuse	Pistorius hearings
Libya crisis	Abducted girl reunites with her mother	Floods Sicily
Football fans attack in Lyon	Algeria oil killings	
	Hyderabad explosions	
	Immigration	
	WEF	
	Child abduction	
	Pistorius hearings	
	Lib Dems' sexual harassment scandal	

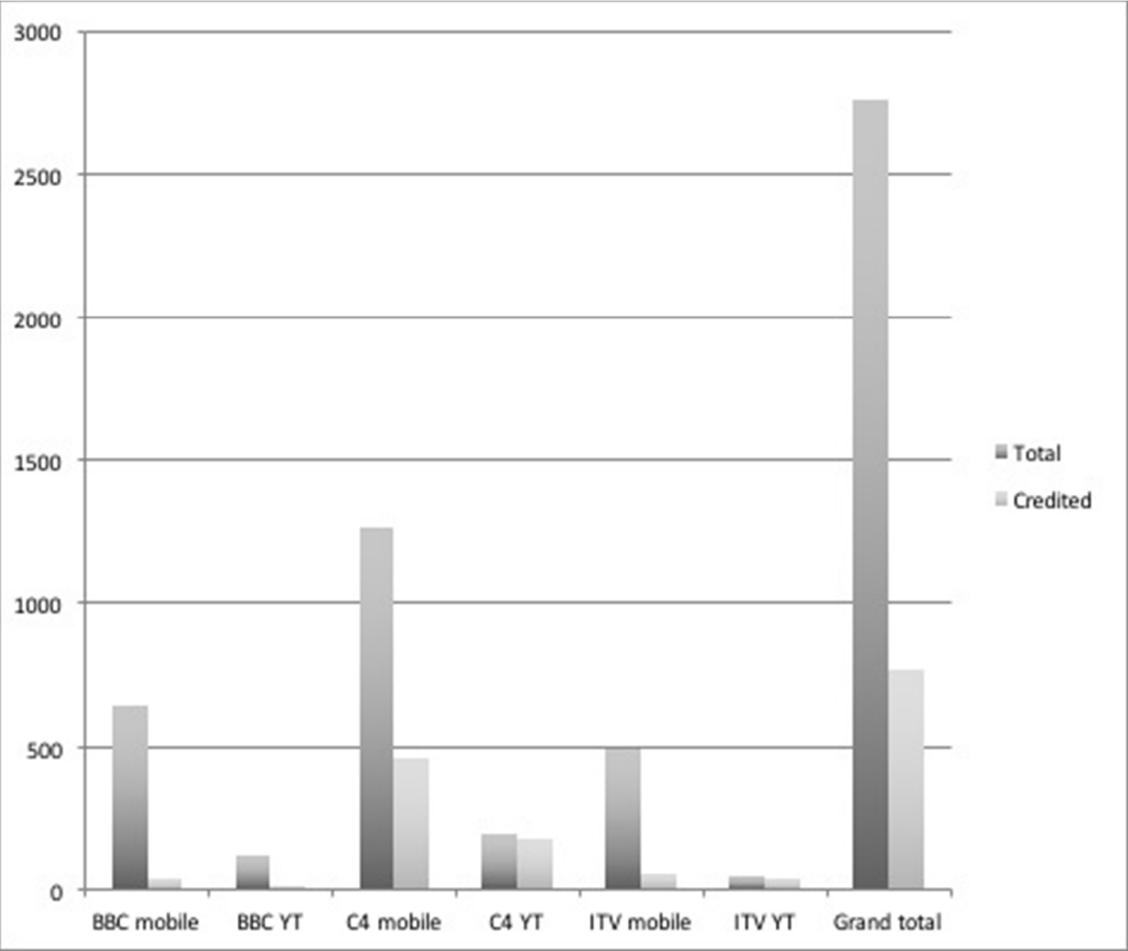
Stories covered in sample news bulletins by channel using either mobile devices or YouTube material. Stories are listed in chronological order from beginning of the sample period (at top).

Figure 1: Sources of video



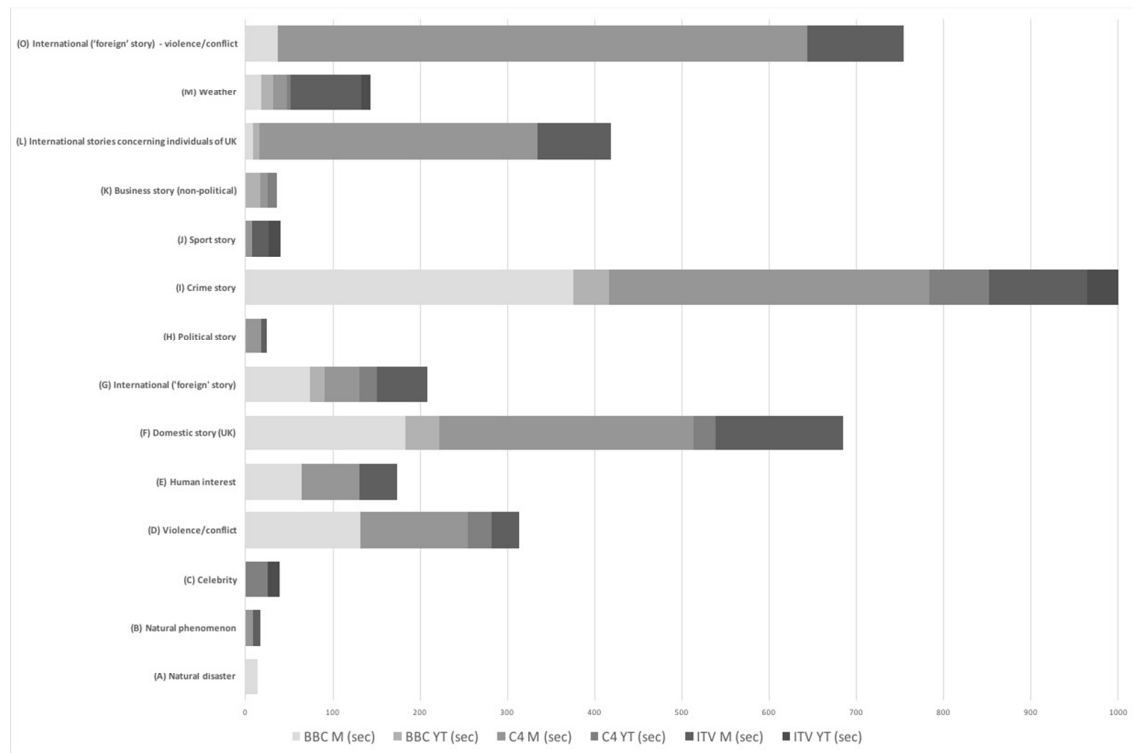
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Figure 2: Crediting



Mobile and YouTube content used by the three channels together with proportion of this footage credited by broadcasters to content creators/originators (in seconds)

Figure 3: Mobile and YouTube Topics



Topics of news stories illustrated with either mobile (M) or YouTube (YT) content in sample news bulletins.